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REMARKS

Reexamination and reconsideration of this application is respectfully requested in light of the foregoing amendments to claim 1 and the following remarks.

Claims 1, 3, 8 and 10-14 are pending in this application. Claims 2, 4-7 and 9 were previously canceled without prejudice or disclaimer. Claims 10-14 have been withdrawn from consideration due to a restriction requirement. No new claims have been added. No new matter has been added to the application. Support for the amendments to claim 1 can be found at p. 10, lines 26-28 and at p. 12, lines 17-20.

Applicant notes the Examiner's consideration of the information cited in the Information Disclosure Statement filed January 25, 2007 as acknowledged in the Office Action Summary. Applicant further notes the Examiner's acknowledgment of Applicant's claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document as well as acceptance of the drawings filed January 16, 2004.

Objection to Claim 1

Claim 1 is objected to because the lower limit for Mn in the composition should be 0.05 and not "0.5". This error was corrected by a Supplemental Amendment submitted to the Office on April 13, 2007. It is requested that the Supplement Amendment be acknowledged.

Rejection of Claims 1, 3 and 8

Claims 1, 3 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukazawa et al. (Japanese Publication No. 357207161A) alone or in view of Table 1.1 in *Introduction to Steels and Case Irons* publication. Claims 1, 3 and 8 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Usuda et al. (Japanese Publication No. 358217661A)

in view of Fukazawa et al. (Japanese Publication No. 357207161A), Okino et al. (Japanese Publication No. 407070713) and Table 1.1 in *Introducton to Steels and Case Irons* publication.

Claim 1 has been further amended to limit the content of Mn from 0.05 to 0.30%, and to limit the total amount of Nb and/or Ta in the alloy from 0.02 to 0.22%. The composition as claim is not taught or suggested by the prior art relied upon in the Office Action.

In particular, Fukazawa et al. discloses a Mn content to be in the range of 0.5 to 1.0% and that Nb is in the range of 0.3 to 0.7%. These ranges are not within the ranges as set for in amended claim 1. Further, Fukazawa et al. do not disclose the use of Ta in their composition. As for Usuda et al., the reference does not disclose Mn and nitrogen as components in the disclosed heat resistant alloy. The present inventions requires Mn and nitrogen as components.

Examiner appears to be asserting that because the claimed alloy wt% ranges of Fukazawa et al. overlap and the alloy is useful in manufacturing turbine components, the reference meets the square value and ratio limitations of claim 1. Applicant respectfully disagrees.

The English abstract of Fukazawa is silent on the utility of the alloy. It does not disclose that the disclosed alloy is useful to make turbine components as asserted by the Examiner. In addition, as discussed *supra*, claim 1 requires a limitation on the square value and a specific lower limit for ratio range for Mo/(Mo + 0.5W). These limitations are not disclosed or suggested by Fukazawa et al.

Claim 1 requires that the value of the square of a difference between the Ni amount and the Co amount, and the Ni amount not exceed 1.8. Fukazawa et al. do not recognize, let alone disclose or suggest, the claimed relationship between Ni and Co as claimed. As for the ratio of

Mo/(Mo + 0.5W), Fukazawa et al. do not disclose this ratio, let alone suggest that a special relationship exists between Mo and W in the alloy composition.

Table 1.1 in *Introduction to Steels and Case Irons* publication does not make up for the deficiencies of Fukazawa et al. and Usuda et al. The Table merely lists elements and the properties of steel associated with specific elements added to steel. It does not disclose or suggest the specific heat resistant steel claimed in the present application.

The deficiencies of Fukazawa et al., Usuda et al. and Table 1.1 have been addressed *supra*. These deficiencies are not cured by the combination of any of these references with Okino et al. Okino et al. discloses a cast steel, and not a heat resistant steel. The addition of Mn and Si is required in cast steel to improve its castability. The cast steels disclosed in the embodiments of the reference (see Table 1 Okino et al.), all have a Mn content greater than 0.30%, which is substantially higher than the amount of Mn recited in claim 1 as amended. Moreover, Okino et al. do not recognize the relationship between the amounts Ni and Co as recited in claim 1, which restricts the amounts of Ni and Co that can be added to the steel. Table 1 in Okino et al. shows a high Co and low Ni composition.

For all of the foregoing reasons, Usuda et al, Fukazawa et al, Okino et al. and Table 1.1 in *Introduction to Steels and Case Irons* publication, taken alone or in combination, fail to disclose or suggest the claimed high resistant steel composition. Accordingly, it is respectfully requested that the rejections of claims 1, 3 and 8 under 35 U.S.C. § 103 be reconsidered and withdrawn.

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Conclusion

For the foregoing reasons, it is submitted that the claims 1, 3 and 8 are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. § 1.17 and due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account

Respectfully submitted,

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper (including any paper referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Date: July 12, 2007

Cameron K. Weiffenbach, Registration No. 44,488